

# GNSS Survey Antenna GPS1000

**Harxon**  
a *BDStar* company

## HIGH PRECISION GNSS ANTENNA FOR SURVEYING APPLICATIONS



### HIGH PHASE CENTER STABILITY

GPS1000 features a multi-point feeding design to achieve greater phase center stability. It effectively improves measurement accuracy and provides better positioning solutions.

### TRACKING IN CHALLENGING ENVIRONMENTS

The ability to receive low elevation signals with high gain and wide beam width makes GPS1000 an excellent choice for tracking visible satellites under challenging conditions, providing the positioning solutions with precision and reliable data. It can be widely used in GNSS surveying applications where high precision is needed, such as obstructed environment of tree lines or construction.

### STRONG ANTI-INTERFERENCE PERFORMANCE

The antenna LNA features an excellent out-of-band rejection performance, which can suppress the electromagnetic interference, providing the stability and reliability of GNSS signals. Also it effectively avoids disconnection dangerous when receivers are operated under complex electro magnetic environments such as communication base station applications or urban area.

### DURABLE, EASY-INSTALLATION DESIGN FOR PRECISION APPLICATIONS

Its compact and lightweight design, making GPS1000 highly portable and suitable for outdoor operating in precision applications. The patented waterproof and breathable design, durable enclosure has been proven to sustain the harsh conditions by meeting IP67, easily protecting GPS1000 from dust and water for quite a long time.

### KEY FEATURES

- Support GPS, Glonass, Galileo, Beidou, QZSS, IRNSS and SBAS signal reception
- Stable phase center guarantees the accuracy of positioning within millimeter-level
- Strong anti-interference ability to endure the challenging operating environments
- IP67 ruggedized structure

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## PERFORMANCE

### Signal Received

GPS	L1/L2/L5/L-Band
GLONASS	L1/L2/L3
BDS	B1/B2/B3
GALILEO	E1/E6/E5a/E5b
QZSS	L1/L2/L5/L6
IRNSS	L5
SBAS	L1/L5

**Nominal Impedance** 50Ω

**Polarization** RHCP

**Axial Ratio** ≤3dB

### Gain at Zenith (90°)

1164-1300MHz	5.5dBi(maximum)
1525-1615MHz	5.5dBi(maximum)

**LNA Gain** 40dB(typical)

**Noise Figure** ≤2dB

**Output/Input VSWR** ≤2.0

**Operation Voltage** +3.3VDC to +12VDC

**Operation Current** 45mA(maximum)

**Group Delay Ripple** <5ns

## MECHANICAL

**Dimensions**  $\phi 152 \times 62.2$ mm

**Connector** TNC female

**Weight** ≤500g

**Mounting** BSW5/8"-11 screw, 12-14mm

## ENVIRONMENTAL

### Temperature

Operating -40°C to +85°C

Storage -55°C to +85°C

**Humidity** 95% non-condensing

**Water/Dust Resistance** IP67

**Regulatory Compliance** NGS, FCC, CE, RoHS

For the most recent details of this product:

<http://en.harxon.com/products-detail.php?Prolid=48>

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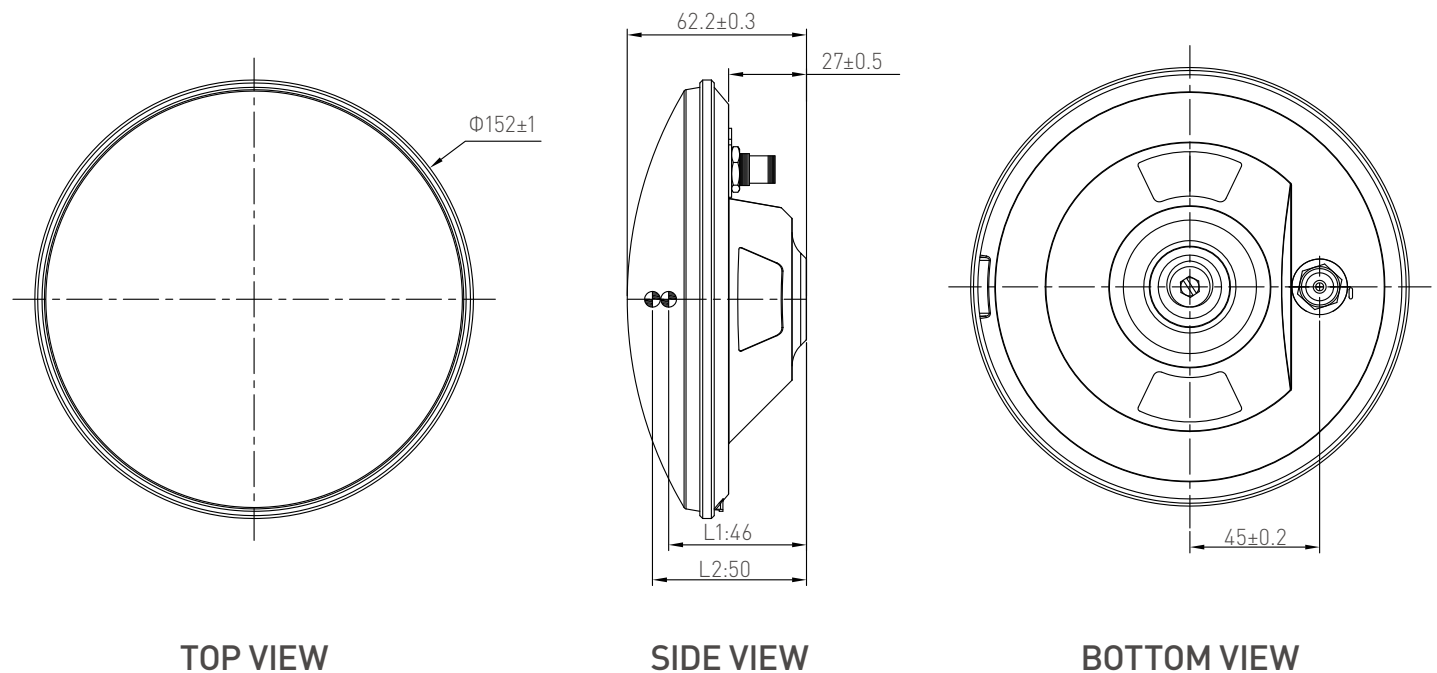
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## Structure& Phase Center Drawing (mm)



Undeclared tolerance:  $\pm 0.3$ mm